FIG. 1 (SEQ ID NOS: 1 and 5)

```
1    GAGGTCCAGC TTCAGCAGTC TGGACCTGAC CTGGTGAAGC CTGGGGCTTC
     E   V   Q   L   Q   Q   S   G   P   D   L   V   K   P   G   A   S

51   AGTGAAGATA TCCTGCAAGG CTTCTGGTTA CTCATTCACT GGCTACTACA
     V   K   I   S   C   K   A   S   G   Y   S   F   T   G   Y   Y

101  TGCACTGGGT GAAGCAGAGC CATGGAAAGA GCCTTGAGTG GATTGGACGT
     M   H   W   V   K   Q   S   H   G   K   S   L   E   W   I   G   R

151  ATTAATCCTA ACAATGGTGT TACTCTCTAC AACCAGAAAT TCAAGGACAA
     I   N   P   N   N   G   V   T   L   Y   N   Q   K   F   K   D   K

201  GGCCATATTA ACTGTAGACA AGTCATCCAC CACAGCCTAC ATGGAGCTCC
     A   I   L   T   V   D   K   S   S   T   T   A   Y   M   E   L

251  GCAGCCTGAC ATCTGAGGAC TCTGCGGTCT ATTACTGTGC AAGATCTACT
     R   S   L   T   S   E   D   S   A   V   Y   Y   C   A   R   S   T

301  ATGATTACGA ACTATGTTAT GGACTACTGG GGTCAAGTAA CCTCAGTCAC
     M   I   T   N   Y   V   M   D   Y   W   G   Q   V   T   S   V   T

351  CGTCTCCTCA GGTGGTGGTG GGAGCGGTGG TGGCGGCACT GGCGGCGGCG
     V   S   S   G   G   G   G   S   G   G   G   G   T   G   G   G

401  GATCTAGTAT TGTGATGACC CAGACTCCCA CATTCCTGCT TGTTTCAGCA
     G   S   S   I   V   M   T   Q   T   P   T   F   L   L   V   S   A

451  GGAGACAGGG TTACCATAAC CTGCAAGGCC AGTCAGAGTG TGAGTAATGA
     G   D   R   V   T   I   T   C   K   A   S   Q   S   V   S   N   D

501  TGTAGDTTGG TACCAACAGA AGCCAGGGCA GTCTCCTACA CTGCTCATAT
     V   A   W   Y   Q   Q   K   P   G   Q   S   P   T   L   L   I

551  CCTATACATC CAGTCGCTAC GCTGGAGTCC CTGATCGCTT CATTGGCAGT
     S   Y   T   S   S   R   Y   A   G   V   P   D   R   F   I   G   S

601  GGATATGGGA CGGATTTCAC TTTCACCATC AGCACTTTGC AGGCTGAAGA
     G   Y   G   T   D   F   T   F   T   I   S   T   L   Q   A   E   D

651  CCTGGCAGTT TATTTCTGTC AGCAAGATTA TAATTCTCCT CCGACGTTCG
     L   A   V   Y   F   C   Q   Q   D   Y   N   S   P   P   T   F

701  GTGGAGGCAC CAAGCTGGAA ATCAAACGG
     G   G   G   T   K   L   E   I   K   R
```

FIG. 2 (SEQ ID NOS: 3 and 7)

```
ATGGGCCACA CACGGAGGCA GGGAACATCA CCATCCAAGT GTCCATACCT    50
  M  G  H    T  R  R  Q    G  T  S    P  S  K     C  P  Y  L

CAATTTCTTT CAGCTCTTGG TGCTGGCTGG TCTTTCTCAC TTCTGTTCAG   100
  N  F  F    Q  L  L     V  L  A  G    L  S  H    F  C  S

GTGTTATCCA CGTGACCAAG GAAGTGAAAG AAGTGGCAAC GCTGTCCTGT   150
  G  V  I  H    V  T  K    E  V  K     E  V  A  T    L  S  C

GGTCACAATG TTTCTGTTGA AGAGCTGGCA CAAACTCGCA TCTACTGGCA   200
  G  H  N    V  S  V  E    E  L  A    Q  T  R    I  Y  W  Q

AAAGGAGAAG AAAATGGTGC TGACTATGAT GTCTGGGGAC ATGAATATAT   250
  K  E  K    K  M  V    L  T  M  M    S  G  D    M  N  I

GGCCCGAGTA CAAGAACCGG ACCATCTTTG ATATCACTAA TAACCTCTCC   300
W  P  E  Y    K  N  R    T  I  F    D  I  T    N  L  S

ATTGTGATCC TGGCTCTGCG CCCATCTGAC GAGGGCACAT ACGAGTGTGT   350
  I  V  I    L  A  L  R    P  S  D    E  G  T    Y  E  C  V

TGTTCTGAAG TATGAAAAAG ACGCTTTCAA GCGGGAACAC CTGGCTGAAG   400
  V  L  K    Y  E  K    D  A  F  K    R  E  H    L  A  E

TGACGTTATC AGTCAAAGCT GACTTCCCTA CACCTAGTAT ATCTGACTTT   450
V  T  L  S    V  K  A    D  F  P    T  P  S  I    S  D  F

GAAATTCCAA CTTCTAATAT TAGAAGGATA ATTTGCTCAA CCTCTGGAGG   500
  E  T  P    T  S  N  I    R  R  I    I  C  S    T  S  G  G

TTTTCCAGAG CCTCACCTCT CCTGGTTGGA AAATGGAGAA GAATTAAATG   550
  F  P  E    P  H  L    S  W  L  E    N  G  E    E  L  N

CCATCAACAC AACAGTTTCC CAAGATCCTG AAACTGAGCT CTATGCTGTT   600
A  I  N  T    T  V  S    Q  D  P    E  T  E  L    Y  A  V

AGCAGCAAAC TGGATTTCAA TATGACAACC AACCACAGCT TCATGTGTCT   650
  S  S  K    L  D  F  N    M  T  T    N  H  S    F  M  C  L

CATCAAGTAT GGACATTTAA GAGTGAATCA GACCTTCAAC TGGAATACAA   700
  I  K  Y    G  H  L    R  V  N  Q    T  F  N    W  N  T

CCAAGCAAGA GCATTTTCCT GATGGAGGCG GGGGATCCGA GGTCCAGCTT   750
T  K  Q  E    H  F  P    D  G  G    G  G  S  E    V  Q  L
```

```
CAGCAGTCTG GACCTGACCT GGTGAAGCCT GGGGCTTCAG TGAAGATATC    800
 Q   Q   S   G   P   D   L   V   K   P   G   A   S   V   K   I   S

CTGCAAGGCT TCTGGTTACT CATTCACTGG CTACTACATG CACTGGGTGA    850
  C   K   A   S   G   Y   S   F   T   G   Y   Y   M   H   W   V

AGCAGAGCCA TGGAAAGAGC CTTGAGTGGA TTGGACGTAT TAATCCTAAC    900
 K   Q   S   H   G   K   S   L   E   W   I   G   R   I   N   P   N

AATGGTGTTA CTCTCTACAA CCAGAAATTC AAGGACAAGG CCATATTAAC    950
 N   G   V   T   L   Y   N   Q   K   F   K   D   K   A   I   L   T

TGTAGACAAG TCATCCACCA CAGCCTACAT GGAGCTCCGC AGCCTGACAT    1000
  V   D   K   S   S   T   T   A   Y   M   E   L   R   S   L   T

CTGACCACTC TGCGGTCTAT TACTGTGCAA GATCTACTAT GATTACGAAC    1050
 S   E   D   S   A   V   Y   Y   C   A   R   S   T   M   I   T   N

TATGTTATGG ACTACTGGGG TCAAGTAACC TCAGTCACCG TCTCCTCAGG    1100
 Y   V   M   D   Y   W   G   Q   V   T   S   V   T   V   S   S   G

TGGTGGTGGG AGCGGTGGTG GCGGCACTGC CGCCGGCGGA TCTAGTATTG    1150
 G   G   G   S   G   G   G   G   T   G   G   G   S   S   I

TGATGACCCA GACTCCCACA TTCCTGCTTG TTTCAGCAGG AGACAGCCTT    1200
 V   M   T   Q   T   P   T   F   L   L   V   S   A   G   D   R   V

ACCATAACCT GCAAGGCCAG TCAGAGTGTG AGTAATGATG TAGCTTGGTA    1250
 T   I   T   C   K   A   S   Q   S   V   S   N   D   V   A   W   Y

CCAACAGAAG CCAGGGCAGT CTCCTACACT GCTCATATCC TATACATCCA    1300
 Q   Q   K   P   G   Q   S   P   T   L   L   I   S   Y   T   S

GTCGCTACGC TGGAGTCCCT GATCGCTTCA TTGGCAGTGG ATATGGGACG    1350
 S   R   Y   A   G   V   P   D   R   F   I   G   S   G   Y   G   T

GATTTCACTT TCACCATCAG CACTTTGCAG GCTGAAGACC TGGCAGTTTA    1400
 D   F   T   F   T   I   S   T   L   Q   A   E   D   L   A   V   Y

TTTCTGTCAG CAAGATTATA ATTCTCCTCC GACGTTCGGT GGAGGCACCA    1450
 F   C   Q   Q   D   Y   N   S   P   P   T   F   G   G   T

AGCTGGAAAT CAAATAA
 K   L   E   I   K   .
```

FIG. 2CONT'D

```
1     ATGGGACTGA  GTAACATTCT  CTTTGTGATG  GCCTTCCTGC  TCTCTGGTGC
      M   G   L    S   N   I   L    F   V   M    A   F   L    L   S   G   A

51    TGCTCCTCTG  AAGATTCAAG  CTTATTTCAA  TGAGACTGCA  GACCTGCCAT
      A   P   L    K   I   Q    A   Y   F   N    E   T   A    D   L   P

101   GCCAATTTGC  AAACTCTCAA  AACCAAAGCC  TGAGTGAGCT  AGTAGTATTT
      C   Q   F    A   N   S   Q    N   Q   S    L   S   E   L    V   V   F

151   TGGCAGGACC  AGGAAAACTT  GGTTCTGAAT  GAGGTATACT  TAGGCAAAGA
      W   Q   D    Q   E   N   L    V   L   N    E   V   Y    L   G   K   E

201   GAAATTTGAC  AGTGTTCATT  CCAAGTATAT  GGGCCGCACA  AGTTTTGATT
      K   F   D    S   V   H    S   K   Y   M    G   R   T    S   F   D

251   CGGACAGTTG  GACCCTGAGA  CTTCACAATC  TTCAGATCAA  GGACAAGGGC
      S   D   S   W    T   L   R    L   H   N    L   Q   I   K    D   K   G

301   TTGTATCAAT  GTATCATCCA  TCACAAAAAG  CCCACAGGAA  TGATTCGCAT
      L   Y   Q    C   I   I   H    H   K   K    P   T   G    M   I   R   I

351   CCACCAGATG  AATTCTGAAC  TGTCAGTGCT  TGCTAACTTC  AGTCAACCTG
      H   Q   M    N   S   E    L   S   V   L    A   N   F    S   Q   P

401   AAATAGTACC  AATTTCTAAT  ATAACAGAAA  ATGTGTACAT  AAATTTGACC
      E   I   V   P    I   S   N    I   T   E    N   V   Y   I    N   L   T

451   TGCTCATCTA  TACACGGTTA  CCCAGAACCT  AAGAAGATGA  GTGTTTTGCT
      C   S   S    I   H   G   Y    P   E   P    K   K   M    S   V   L   L

501   AAGAACCAAG  AATTCAACTA  TCGAGTATGA  TGGTATTATG  CAGAAATCTC
      R   T   K    N   S   T    I   E   Y   D    G   I   M    Q   K   S

551   AAGATAATGT  CACAGAACTG  TACGACGTTT  CCATCAGCTT  GTCTGTTTCA
      Q   D   N   V    T   E   L    Y   D   V    S   I   S   L    S   V   S

601   TTCCCTGATG  TTACGAGCAA  TATGACCATC  TTCTGTATTC  TGGAAACTGA
      F   P   D    V   T   S   N    M   T   I    F   C   I    L   E   T   D

651   CAAGACGCGG  CTTTTATCTT  CACCTTTCTC  TATAGAGCTT  GAGGACCCTC
      K   T   R    L   L   S    S   P   F   S    I   E   L    E   D   P

701   AGCCTCCCCC  AGACCACATT  CCTGGAGGCG  GGGGATCC
      Q   P   P   P    D   H   I    P   G   G    G   G   S
```

FIG. 4 (SEQ ID NOS: 9 and 10)

FIG. 5 (SEQ ID NO: 11)

```
atggcttgca attgtcagtt gatgcaggat acaccactcc tcaagtttcc atgtccaagg 60
ctcattcttc tctttgtgct gctgattcgt ctttcacaag tgtcttcaga tgttgatgaa 120
caactgtcca agtcagtgaa agataaggta ttgctgcctt gccgttacaa ctctccgcat 180
gaagatgagt ctgaagaccg aatctactgg caaaaacatg acaaagtggt gctgtctgtc 240
attgctggga aactaaaagt gtggcccgag tataagaacc ggactttata tgacaacact 300
acctactctc ttatcatcct gggcctggtc ctttcagacc ggggcacata cagctgtgtc 360
gttcaaaaga aggaaagagg aacgtatgaa gttaaacact tggctttagt aaagttgtcc 420
atcaaagctg acttctctac ccccaacata actgagtctg gaaacccatc tgcagacact 480
aaaaggatta cctgctttgc ttccgggggt ttcccaaagc ctcgcttctc ttggttggaa 540
aatggaagag aattacctgg catcaatacg acaatttccc aggatcctga atctgaattg 600
tacaccatta gtagccaact agatttcaat acgactcgca accacaccat taagtgtctc 660
attaaatatg gagatgctca cgtgtcagag gacttcacct gggaaaaaacc cccagaagac 720
cctcctgata gcaagcccgg gggtggtggg agcggtggtg gcggcagtgg cggcggcgga 780
actagtgagg tccagcttca gcagtctgga cctgacctgg tgaagcctgg ggcttcagtg 840
aagatatcct gcaaggcttc tggttactca ttcactggct actacatgca ctggggtaag 900
cagagccatg gaaagagcct tgagtggatt ggacgtatta atcctaacaa tggtgttact 960
ctctacaacc agaaattcaa ggacaaggcc atattaactg tagacaagtc atccaccaca 1020
gcctacatgg agctccgcag cctgacatct gaggactctg cggtctatta ctgtgcaaga 1080
tctactatga ttacgaacta tgttatggac tactgggggtc aagtaacttc agtcaccgtc 1140
tcttcaggtg gtggtgggag cggtggtggc ggcactggcg gcggcggatc tagtattgtg 1200
atgacccaga ctcccacatt cctgcttgtt tcagcaggag acagggttac cataacctgc 1260
aaggccagtc agagtgtgag taatgatgta gcttggtacc aacagaagcc agggcagtct 1320
cctacactgc tcatatccta tacatccagt cgctacgctg gagtccctga tcgcttcatt 1380
ggcagtggat atgggacgga tttcactttc accatcagca ctttgcaggc tgaagacctg 1440
gcagtttatt tctgtcagca agattataat tctcctccga cgttcggtgg aggcaccaag 1500
ctggaaatca aacggtaa                                               1518
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FIG. 6 (SEQ ID NOS: 4 and 8)

Leader / 5T4 scFv / HIgG DNA and deduced protein sequence

```
CTCGAGCCACCATGGGATGGAGCTGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTGTCCACTCCGAGGTCCAGCTG
         M  G  W  S  C  I  I  L  F  L  V  A  T  A  T  G  V  H  S  E  V  Q  L

CAGCAGTCTGGACCTGACCTGGTGAAGCCTGGGGCTTCAGTGAAGATATCCTGCAAGGCTTCTGGTTACTCATTCACTGG
 Q  Q  S  G  P  D  L  V  K  P  G  A  S  V  K  I  S  C  K  A  S  G  Y  S  F  T

CTACTACATGCACTGGGTGAAGCAGAGCCATGGAAAGAGCCTTGAGTGGATTGGACGTATTAATCCTAACAATGGTGTTA
 G  Y  Y  M  H  W  V  K  Q  S  H  G  K  S  L  E  W  I  G  R  I  N  P  N  N  G  V

CTCTCTACAACCAGAAATTCAAGGACAAGGCCATATTAACTGTAGACAAGTCATCCACCACAGCCTACATGGAGCTCCGC
 T  L  Y  N  Q  K  F  K  D  K  A  I  L  T  V  D  K  S  S  T  T  A  Y  M  E  L  R

AGCCTGACATCTGAGGACTCTGCGGTCTATTACTGTGCAAGATCTACTATGATTACGAACTATGTTATGGACTACTGGGG
 S  L  T  S  E  D  S  A  V  Y  Y  C  A  R  S  T  M  I  T  N  Y  V  M  D  Y  W

TCAAGTAACTTCAGTCACCGTCTCTTCAGGTGGTGGTGGGAGCGGTGGTGGCGGCACTGGCGGCGGCGGATCTAGTATTG
 G  Q  V  T  S  V  T  V  S  S  G  G  G  G  S  G  G  G  G  T  G  G  G  G  S  S  I

TGATGACCCAGACTCCCACATTCCTGCTTGTTTCAGCAGGAGACAGGGTTACCATAACCTGCAAGGCCAGTCAGAGTGTG
 V  M  T  Q  T  P  T  F  L  L  V  S  A  G  D  R  V  T  I  T  C  K  A  S  Q  S  V

AGTAATGATGTAGCTTGGTACCAACAGAAGCCAGGGCAGTCTCCTACACTGCTCATATCCTATACATCCAGTCGCTACGC
 S  N  D  V  A  W  Y  Q  Q  K  P  G  Q  S  P  T  L  L  I  S  Y  T  S  S  R  Y

TCCAGTCCCTGATCGCTTCATTGGCAGTGGATATGGGACGGATTTCACTTTCACCATCAGCACTTTGCAGGCTGAAGACC
 A  G  V  P  D  R  F  I  G  S  G  Y  G  T  D  F  T  F  T  I  S  T  L  Q  A  E  D

TGGCAGTTTATTTCTGTCAGCAAGATTATAATTCTCCTCCGACGTTCGGTGGAGGCACCAAGCTTGAAATCAAACGGGCC
 L  A  V  Y  F  C  Q  Q  D  Y  N  S  P  P  T  F  G  G  G  T  K  L  E  I  K  R  A

TCCACCAAGGGCCCATCGGTCTTCCCCCTGGCACCCTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCT
 S  T  K  G  P  S  V  F  P  L  A  P  S  S  K  S  T  S  G  G  T  A  A  L  G  C

GGTCAAGGACTACTTCCCCGAACCGGTGACGGTGTCGTGGAACTCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCCCG
 L  V  K  D  Y  F  P  E  P  V  T  V  S  W  N  S  G  A  L  T  S  G  V  H  T  F  P

CTGTCCTACAGTCCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTAC
 A  V  L  Q  S  S  G  L  Y  S  L  S  S  V  V  T  V  P  S  S  S  L  G  T  Q  T  Y

ATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGACAAGAAAGTTGAGCCCAAATCTTGTGACAAAACTCACAC
 I  C  N  V  N  H  K  P  S  N  T  K  V  D  K  K  V  E  P  K  S  C  D  K  T  H

ATGCCCACCGTGCCCAGCACCTGAACTCCTGGGGGGACCGTCAGTCTTCCTCTTCCCCCCAAAACCCAAGGACACCCTCA
 T  C  P  P  C  P  A  P  E  L  L  G  G  P  S  V  F  L  F  P  P  K  P  K  D  T  L

TGATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTAC
 M  I  S  R  T  P  E  V  T  C  V  V  V  D  V  S  H  E  D  P  E  V  K  F  N  W  Y

GTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGCGT
 V  D  G  V  E  V  H  N  A  K  T  K  P  R  E  E  Q  Y  N  S  T  Y  R  V  V  S

CCTCACCGTCCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCA
 V  L  T  V  L  H  Q  D  W  L  N  G  K  E  Y  K  C  K  V  S  N  K  A  L  P  A  P

TCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTG
 I  E  K  T  I  S  K  A  K  G  Q  P  R  E  P  Q  V  Y  T  L  P  P  S  R  D  E  M

ACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGG
 T  K  N  Q  V  S  L  T  C  L  V  K  G  F  Y  P  S  D  I  A  V  E  W  E  S  N

GCAGCCGGAGAACAACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCTATAGCAAGCTCACCG
 G  Q  P  E  N  N  Y  K  T  T  P  P  V  L  D  S  D  G  S  F  F  L  Y  S  K  L  T

TGGACAAGAGCAGGTGGCAGCAGGGGAACGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAG
 V  D  K  S  R  W  Q  Q  G  N  V  F  S  C  S  V  M  H  E  A  L  H  N  H  Y  T  Q

AAGAGCCTCTCCCTGTCCCCGGGTAAATGACTCGAG
 K  S  L  S  L  S  P  G  K  .
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FIG. 7 (SEQ ID NO: 12)

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ctcgagccac catgggatgg agctgtatca tcctcttctt ggtagcaaca gctacaggtg 60
tccactccga ggtccagctg cagcagtctg gacctgacct ggtgaagcct ggggcttcag 120
tgaagatatc ctgcaaggct tctggttact cattcactgg ctactacatg cactgggtga 180
agcagagcca tggaaagagc cttgagtgga ttggacgtat taatcctaac aatggtgtta 240
ctctctacaa ccagaaattc aaggacaagg ccatattaac tgtagacaag tcatccacca 300
cagcctacat ggagctccgc agcctgacat ctgaggactc tgcggtctat tactgtgcaa 360
gatctactat gattacgaac tatgttatgg actactgggg tcaagtaact tcagtcaccg 420
tctcttcagg tggtggtggg agcggtggtg cggcactgg cggcggcgga tctagtattg 480
tgatgaccca gactcccaca ttcctgcttg tttcagcagg agacagggtt accataacct 540
gcaaggccag tcagagtgtg agtaatgatg tagcttggta ccaacagaag ccagggcagt 600
ctcctacact gctcatatcc tatacatcca gtcgctacgc tggagtccct gatcgcttca 660
ttggcagtgg atatgggacg gatttcactt tcaccatcag cactttgcag gctgaagacc 720
tggcagttta tttctgtcag caagattata attctcctcc gacgttcggt ggaggcacca 780
agcttgaaat caaacgggcc tccacacaga gcccatccgt cttccccttg acccgctgct 840
gcaaaaacat tccctccaat gccacctccg tgactctggg ctgcctggcc acgggctact 900
tcccggagcc ggtgatggtg acctgggaca caggctccct caacgggaca actatgacct 960
taccagccac caccctcacg ctctctggtc actatgccac catcagcttg ctgaccgtct 1020
cgggtgcgtg ggccaagcag atgttcacct gccgtgtggc acacactcca tcgtccacag 1080
actgggtcga caacaaaacc ttcagcgtct gctccaggga cttcacccg cccaccgtga 1140
agatcttaca gtcgtcctgc gacggcggcg ggcacttccc cccgaccatc cagctcctgt 1200
gcctcgtctc tgggtacacc ccagggacta tcaacatcac ctggctggag gacgggcagg 1260
tcatggacgt ggacttgtcc accgcctcta ccacgcagga gggtgagctg gcctccacac 1320
aaagcgagct caccctcagc cagaagcact ggctgtcaga ccgcacctac acctgccagg 1380
tcacctatca aggtcacacc tttgaggaca gcaccaagaa gtgtgcagat tccaacccga 1440
gaggggtgag cgcctaccta agccggccca gcccgttcga cctgttcatc cgcaagtcgc 1500
ccacgatcac ctgtctggtg gtggacctgg cacccagcaa ggggaccgtg aacctgacct 1560
ggtcccgggc cagtgggaag cctgtgaacc actccaccag aaaggaggag aagcagcgca 1620
atggcacgtt aaccgtcacg tccaccctgc cggtgggcac ccgagactgg atcgagggg 1680
agacctacca gtgcagggtg acccaccccc acctgcccag ggccctcatg cggtccacga 1740
ccaagaccag cggcccgcgt gctgccccgg aagtctatgc gtttgcgacg ccggagtggc 1800
cggggagccg ggacaagcgc accctcgcct gcctgatcca gaacttcatg cctgaggaca 1860
tctcggtgca gtggctgcac aacgaggtgc agctcccgga cgcccggcac agcacgacgc 1920
agcccgcaa gaccaagggc tccggcttct tcgtcttcag ccgcctggag gtgaccaggg 1980
ccgaatggga gcagaaagat gagttcatct gccgtgcagt ccatgaggca gcgagcccct 2040
cacagaccgt ccagcgagcg gtgtctgtaa atcccggtaa atgagagctc 2090
```

FIG. 8 (SEQ ID NO: 13)

```
atggcttgca attgtcagtt gatgcaggat acaccactcc tcaagtttcc atgtccaagg 60
ctcattcttc tctttgtgct gctgattcgt ctttcacaag tgtcttcaga tgttgatgaa 120
caactgtcca agtcagtgaa agataaggta ttgctgcctt gccgttacaa ctctccgcat 180
gaagatgagt ctgaagaccg aatctactgg caaaaacatg acaaagtggt gctgtctgtc 240
attgctggga aactaaaagt gtggcccgag tataagaacc ggactttata tgacaacact 300
acctactctc ttatcatcct gggcctggtc ctttcagacc ggggcacata cagctgtgtc 360
gttcaaaaga aggaaagagg aacgtatgaa gttaaacact ggctttagt aaagttgtcc 420
atcaaagctg acttctctac ccccaacata actgagtctg aaacccatc tgcagacact 480
aaaaggatta cctgctttgc ttccgggggt ttcccaaagc ctcgcttctc ttggttggaa 540
aatggaagag aattacctgg catcaatacg acaatttccc aggatcctga atctgaattg 600
tacaccatta gtagccaact agatttcaat acgacctgca accacaccat taagtgtctc 660
attaaatatg gagatgctca cgtgtcagag gacttcacct gggaaaaacc cccagaagac 720
cctcctgata gcaagccgg gggtggtggg agcggtggtg cggcagtgg cggcggcgga 780
actagtaata gtgactctga atgtcccctg tcccacgatg ggtactgcct ccatgatggt 840
gtgtgcatgt atattgaagc attggacaag tatgcatgca actgtgttgt tggctacatc 900
ggggagcgat gtcagtaccg agacctgaag tggtgggaac tgcgc 945
```
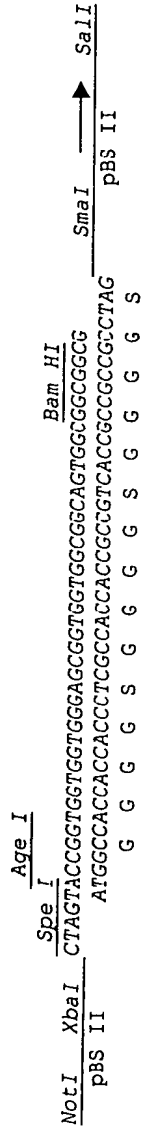
FIG. 20 (SEQ ID NOS: 35 and 36)

pKLink – the (Gly₄Ser)₃ linker in pBluescript II SK (pBS II)

```
                  Spe I     Age I                    Bam HI
         CTAGTACCGGTGGTGGTGGAGCGGTGGTGGTGGCAGTGGCGGCGGCG ────→  SmaI    SalI
NotI XbaI  ATGGCCACCACCACCCTCGCCACCACCACCGTCACCGCCGCCGCCTAG                    pBS II
pBS II      G  G  G  G  S  G  G  G  G  S  G  G  G  G  S
```

FIG. 21 (SEQ ID no. 37)

An scFv and leader sequence in pBSII


```
         Xba I  Spe i  Mfe I        Age I    Bam HI                    Eco RI
                                                                              ────
pBS II                V_H            (Gly₄Ser)3      V_L                        pBS II
```

Xbal

```
CTAGACCCTGCAGGCCACCATGGGATGGAGCTGTATCATCCTCTTCTTGGTAGCAACAGCTACAGGTGTACACTCCC
TGGACGTCCGGTGGTACCCTACCCTCGACATAGTAGGAGAAGAAGAACCATCGTTGTCGATGTCCACATGTGAGGGTAA
        SbfI                                                           MfeI
```
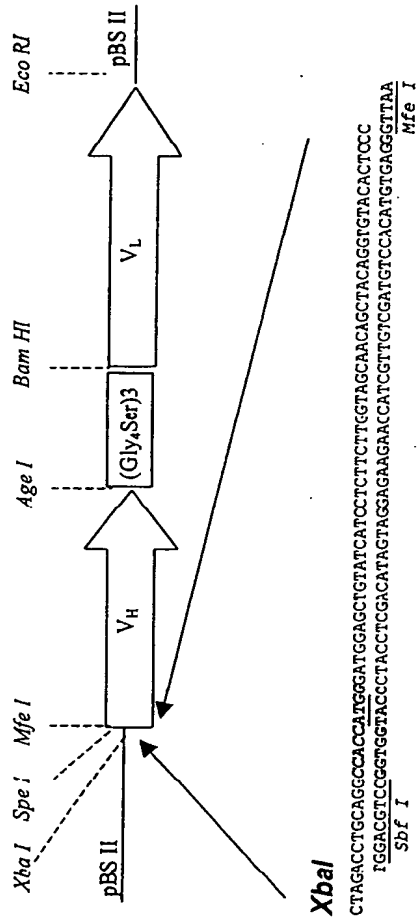
FIG. 26 (SEQ ID NOS: 14 and 15)

Canine 5T4 Coding Sequence

```
ATGCCTGGGGGGTGCTCCCGGGGCCCCGCCGCCGGGGACGGGCGGTTGCGGCTGGCGCGGCTGGCGCTGGTGCTCCTGGG 80
  M  P  G  G  C  S  R  G  P  A  A  G  D  G  R  L  R  L  A  R  L  A  L  V  L  L

CTGGGTCTCCTCGTCCTCGCTCACCTCCTGGGCGCCCTCCGCCGCCGCCTCCACGTCGCCGCCGGCCTCCGCGGCGTCCG 160
  G  W  V  S  S  S  L  T  S  W  A  P  S  A  A  A  S  T  S  P  P  A  S  A  A  S

CCCCGCCCCCGCTGCCGGGCCAGTGCCCCCAGCCTTGCGAGTGCTCGGAGGCGGCGCGCACGGTCAAGTGCGTTAACCGC 240
  A  P  P  P  L  P  G  Q  C  P  Q  P  C  E  C  S  E  A  A  R  T  V  K  C  V  N  R

AACCTGACCGAGGTGCCCGCGGACCTGCCCCCCTACGTGCGCAACCTCTTCCTCACGGGCAACCAGCTGGCGGTGCTGCC 320
  N  L  T  E  V  P  A  D  L  P  P  Y  V  R  N  L  F  L  T  G  N  Q  L  A  V  L

CCCCGGCGCCTTCGCCCGCCGGCCGCCGCTGGCCGAGCTGGCCGCGCTCAACCTGAGCGGCAGCAGCCTGCGGGAGGTGT 400
  P  P  G  A  F  A  R  R  P  P  L  A  E  L  A  A  L  N  L  S  G  S  S  L  R  E  V

GCGCCGGCGCCTTCGAGCACCTGCCCAGCCTGCGCCAGCTCGACCTCAGCCACAACCCGCTGGGCAACCTCAGCGCCTTC 480
  C  A  G  A  F  E  H  L  P  S  L  R  Q  L  D  L  S  H  N  P  L  G  N  L  S  A  F

GCCTTCGCGGGCAGCGACGCCAGCCGCTCGGGCCCCAGCCCCCTGGTGGAGCTGATGCTGAACCACATCGTGCCCCCCGA 560
  A  F  A  G  S  D  A  S  R  S  G  P  S  P  L  V  E  L  M  L  N  H  I  V  P  P

CGACCGGCGGCAGAACCGGAGCTTCGAGGGCATGGTGGCGGCTGCCCTCCGAGCGGGCCGCGCGCTTCGCGGGCTGCAGT 640
  D  D  R  R  Q  N  R  S  F  E  G  M  V  A  A  A  L  R  A  G  R  A  L  R  G  L  Q

GCCTGGAGCTGGCCGGCAACCGCTTCCTCTACTTGCCTCGCGACGTCCTGGCCCAGCTACCCGGCCTCCGGCACCTGGAC 720
  C  L  E  L  A  G  N  R  F  L  Y  L  P  R  D  V  L  A  Q  L  P  G  L  R  H  L  D

CTGCGCAACAACTCCCTGGTGAGCCTCACCTACGTGTCCTTCCGCAACCTGACGCACTTGGAGAGCCTCCACCTGGAGGA 800
  L  R  N  N  S  L  V  S  L  T  Y  V  S  F  R  N  L  T  H  L  E  S  L  H  L  E

CAACGCCCTCAAGGTCCTTCACAACGCCACCCTGGCGGAGCTGCAGAGCCTGCCCCACGTCCGGGTCTTCCTGGACAACA 880
  D  N  A  L  K  V  L  H  N  A  T  L  A  E  L  Q  S  L  P  H  V  R  V  F  L  D  N

ACCCCTGGGTCTGCGATTGTCACATGGCAGACATGGTGGCCTGGCTCAAGGAGACAGAGGTGGTGCCGGGCAAAGCCGGG 960
  N  P  W  V  C  D  C  H  M  A  D  M  V  A  W  L  K  E  T  E  V  V  P  G  K  A  G

CTCACCTGTGCATTCCCGGAGAAAATGAGGAATCGGGCCCTCTTGGAACTCAACAGCTCCCACCTGGACTGTGACCCTAT 1040
  L  T  C  A  F  P  E  K  M  R  N  R  A  L  L  E  L  N  S  S  H  L  D  C  D  P

CCTCCCTCCATCCCTGCAGACTTCTTATGTCTTCCTAGGTATTGTCTTAGCCCTGATAGGCGCCATCTTCCTACTGGTTT 1120
  I  L  P  P  S  L  Q  T  S  Y  V  F  L  G  I  V  L  A  L  I  G  A  I  F  L  L  V

TGTATTTGAACCGCAAGGGGATAAAGAAGTGGATGCATAACATCAGAGATGCCTGCAGGGATCACATGGAAGGGTATCAC 1200
  L  Y  L  N  R  K  G  I  K  K  W  M  H  N  I  R  D  A  C  R  D  H  M  E  G  Y  H

TACAGATACGAAATCAATGCAGACCCCAGGTTAACAAACCTCAGTTCCAATTCGGATGTCTGA                   1263
  Y  R  Y  E  I  N  A  D  P  R  L  T  N  L  S  S  N  S  D  V  .
```